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Yevgeniy Petrovykh

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PATEL, ASHOKKUMAR B

ART UNIT

PAPER NUMBER

2154

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Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                     |  |
|------------------------------|-------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>09/932,033 | Applicant(s)<br>PETROVYKH, YEVGENIY |  |
|                              | Examiner<br>Ashok B. Patel    | Art Unit<br>2154                    |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11/29/2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-42 are subject to examination.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/29/2005 has been entered.

#### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-42 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 1, 2, 18, and 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the enterprise" in 22 line of the claim.

Claim 2 recites the limitation "the internet network" in 2 line of the claim.

Claim 18 recites the limitation " the instant message server" in line 11 of the claim.

There is insufficient antecedent basis for this limitation in the claims.

6. Claims 1 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that they fail to point out what is included or excluded by the claim language. This claim is omnibus type claim, and also Claims 1 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are:

a. Claim 1 recites, " , " the intermediate server having access to routing rules and capability", then how, where, why, and when to associate the same claim reciting "the intermediate server containing an intelligent routing software suite used for disposing all communication events occurring within the enterprise?

For the purpose of this Office Action, Examiner interprets the claim limitation as "intelligent routing software" uses "routing rules and capability".

b. Claim 18 preamble recites: "A proxy server for routing instant messages sourced from clients connected to a data-packet-network to selected ones of a plurality of customer service representatives connected to the network and representing an enterprise:" and "at least one intermediate server connected to and addressable on the network and accessible to the instant message server, the intermediate server having access to routing rules and capability;".

How, where, why, and when " the instant message server" is involved into the functionality of other limitations of this claim.?

For the purpose of this Office Action, Examiner interprets the claim limitation "the instant message server" as being not exhibiting any functionality.

As claim also recites," the intermediate server having access to routing rules and capability", then how, where, why, and when to associate the claims reciting "the intermediate server containing an intelligent routing software suite used for disposing all communication events occurring within the enterprise?

For the purpose of this Office Action, Examiner interprets the claim limitation as "intelligent routing software" uses "routing rules and capability".

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ben-Chanoch (US 6, 707, 906 A1) in view of Kannan (US 2001/0054064 A1)

**Referring to claim 1,**

Ben-Chanoch teaches routing system operable on a data-packet-network for intelligent routing of instant messages between clients connected to the network and customer service representatives (CSRs) connected to the network (Fig.1, col. 2, lines 22-38) comprising:

at least one instant message server connected to and addressable on the network (Fig. 1, element 1, col. 1, line 60-64);

characterized in that clients connected to the network and operating instant message software connect to the instant message server for the purpose of establishing communication with available customer service representatives (col.2, lines 22-38) , and wherein assertion of a connection link advertised by the instant message server establishes bi-directional communication between the client machine (col.3, line11-18) identifying the client and version of instant message software used by the client for the purpose of routing the client request to an appropriate customer service representative thereby establishing an active instant message connection between the client and the selected customer service representative.(col.3, line 1-24).

Although Ben Chanoch teaches these elements as part of the contact center, the reference explicitly fails to teach at least one intermediate server connected to and addressable on the network and accessible to the instant message server the intermediate server having access to routing rules and capability.

Kannan teaches in Fig. 5B, readily available Interact.service server, element 505, incorporating the Customer Service Agent of Fig. 6, as taught at page 6, para.[0073], "Customer service agent 510 is preferably implemented on server 505, which in one embodiment is distinct from the Web server 500. Server 505 is coupled to databases 550 including Oracle, Lotus Notes, DB2, SQL Server, and other Relational Database Managements systems (RDBMS), or non-relational database systems. Server 505 communicates with Mail Gateway 592 and Fax/Pager Gateway 594. Server 505 is also coupled through Web server 500 over the Web to customer browser 520, CSR browser 540, a Supervisor browser 560, and a Site Designer browser 580. Customer service

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agent 510 performs dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support.” Also, Kannan teaches at para.[0095], FIG. 8A shows an example of step 770. Service manager 610 receives the query input in step 755 by the customer through a customer service window. Service manager 610 stores the query in a queue of pending customer queries 613 (step 872). Queue 613 can store the customer URL or other customer identification and the customer input (e.g., question or form input). CSR queue(s) 614 also store available CSRs.”

The “intelligent routing” by Interact.service server, incorporating the Customer Service Agent is taught by Kannan at para.[0094] through [0111], as an “intermediate server.” Thus, Kannan teaches “at least one intermediate server connected to and addressable on the network and accessible to the instant message server the intermediate server having access to routing rules and capability. and further characterized in that the intermediate server contains an intelligent routing software suite used for disposing all communication events occurring within the enterprise.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Ben-Chanoch’s contact center by adding readily available “Interact.service server” as an intermediate server for intelligently routing including dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support as taught by Kannan.

It would have been also obvious for the reasons stated by Kannan in para.[0016] and [0017],” Internet chat programs have been used as well to provide limited customer service over the WWW. For example, a Web site is provided with a "Help" or "Customer Service" button. When a customer browsing the Web site presses the Help button for service, the customer is sent to a chat room to converse with a CSR. Such chat rooms, however, are not private or secure. Chat rooms are essentially a form of "many-to-many" communication. In a chat room, each customer query and a response by a CSR can be seen by all chat room participants. [0017] Similarly, other Internet services, such as, Internet Relay Chat (IRC) or newsgroups, are not suitable for providing customer service in commerce over the Web. IRC broadcasts messages to anyone logged on to IRC. See, Krol at pp. 342-346. In newsgroups, messages are posted and available to all newsgroups users. See, Krol, at pp. 151-185. Enhanced IRC, I-chat, and Palace services provide talk services but do not have adequate security or privacy and do not allow point-to-point communication behind firewalls.” along with the solutions of these issues packaged in “Interact.service server”, by stating in [0018] What is needed is an invention which provides on-line, live customer service between a potential customer and a customer service representative over the World Wide Web in real-time. Customer service is needed which is secure and responsive to particular customer needs. Customer service channeled through secure, private, human-to-human communication between a browsing customer and a CSR in real-time over the Web is needed.”

**Referring to claim 2,**



Ben-Chanoch teaches wherein the data-packet-network is the Internet network. (Fig.1, element "INTERNET").

**Referring to claims 3 and 5,**

Ben-Chanoch teaches the routing system of claim 1 wherein the client connection comprises a network appliance capable of instant messaging operationally coupled to the network, and wherein the network appliance is a computer. (col.3, line 1-25)

**Referring to claims 4 and 6,**

Ben-Chanoch teaches the routing system of claim 1 wherein customer service representative connection comprises a network appliance capable of instant messaging operationally coupled to the network, and wherein the network appliance is a computer. (col.3, line 1-25, Fig.1, element 5)

**Referring to claims 7 and 8,**

Ben-Chanoch teaches the routing system of claim 1 wherein the customer service representatives are human resources, and wherein the customer service representatives include automated systems. (col.3, line 11-24 and line 41-55)

**Referring to claim 9,**

Ben-Chanoch teaches the routing system of claim 1 wherein the addressing system of the network is Internet protocol addressing. (col.1, line 60-64)

**Referring to claim 10,**

Ben-Chanoch teaches the routing system of claim 1 wherein the at least one instant message server retains responsibility of hosting ongoing communication

between clients and customer service representatives. (Fig. 1, element 1, col. 1, line 60-64)

**Referring to claim 11,**

Keeping in mind the teaching of the reference Ben-Chanoch as stated above, the reference fails to teach intermediate server and wherein the at least one intermediate server is granted the responsibility of hosting ongoing communication between clients and customer service representatives.

Kannan teaches in Figs. 5A and 5B, readily available Interact.service server, element 505, incorporating the Customer Service Agent of Fig. 6, as taught at page 6, para.[0073], "Customer service agent 510 is preferably implemented on server 505, which in one embodiment is distinct from the Web server 500. Server 505 is coupled to databases 550 including Oracle, Lotus Notes, DB2, SQL Server, and other Relational Database Managements systems (RDBMS), or non-relational database systems. Server 505 communicates with Mail Gateway 592 and Fax/Pager Gateway 594. Server 505 is also coupled through Web server 500 over the Web to customer browser 520, CSR browser 540, a Supervisor browser 560, and a Site Designer browser 580. Customer service agent 510 performs dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support." Also, Kannan teaches at para.[0095], FIG. 8A shows an example of step 770. Service manager 610 receives the query input in step 755 by the customer through a customer service window. Service manager 610 stores the query in a queue of pending customer queries 613 (step 872). Queue 613 can store the customer URL

or other customer identification and the customer input (e.g., question or form input).

CSR queue(s) 614 also store available CSRs.”

The “intelligent routing” by Interact.service server, incorporating the Customer Service Agent is taught by Kannan at para.[0094] through [0111], as an “intermediate server.” Thus, Kannan teaches “intermediate server and wherein the at least one intermediate server is granted the responsibility of hosting ongoing communication between clients and customer service representatives.”

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Ben-Chanoch’s contact center by adding readily available “Interact.service server” as an intermediate server for intelligently routing including dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support as taught by Kannan.

It would have been also obvious for the reasons stated by Kannan in para.[0016] and [0017],” Internet chat programs have been used as well to provide limited customer service over the WWW. For example, a Web site is provided with a “Help” or “Customer Service” button. When a customer browsing the Web site presses the Help button for service, the customer is sent to a chat room to converse with a CSR. Such chat rooms, however, are not private or secure. Chat rooms are essentially a form of “many-to-many” communication. In a chat room, each customer query and a response by a CSR can be seen by all chat room participants. [0017] Similarly, other Internet services, such as, Internet Relay Chat (IRC) or newsgroups, are not suitable for

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providing customer service in commerce over the Web. IRC broadcasts messages to anyone logged on to IRC. See, Krol at pp. 342-346. In newsgroups, messages are posted and available to all newsgroups users. See, Krol, at pp. 151-185. Enhanced IRC, I-chat, and Palace services provide talk services but do not have adequate security or privacy and do not allow point-to-point communication behind firewalls.” along with the solutions of these issues packaged in “Interact.service server” , by stating in [0018] What is needed is an invention which provides on-line, live customer service between a potential customer and a customer service representative over the World Wide Web in real-time. Customer service is needed which is secure and responsive to particular customer needs. Customer service channeled through secure, private, human-to-human communication between a browsing customer and a CSR in real-time over the Web is needed.”

**Referring to claim 12,**

Keeping in mind the teachings of Ben-Chanoch as stated above, wherein the client, customer service representative, involved in a single routed and established communication channel run instant messaging software compatible to that hosted by the instant message server used to initiate the connection. (col.3, line 1-24), however, the reference explicitly fails to teach at least one intermediate server.

Kannan teaches in Fig. 5B, readily available Interact.service server, element 505, incorporating the Customer Service Agent of Fig. 6, as taught at page 6, para.[0073], “Customer service agent 510 is preferably implemented on server 505, which in one embodiment is distinct from the Web server 500. Server 505 is coupled to databases

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550 including Oracle, Lotus Notes, DB2, SQL Server, and other Relational Database Managements systems (RDBMS), or non-relational database systems. Server 505 communicates with Mail Gateway 592 and Fax/Pager Gateway 594. Server 505 is also coupled through Web server 500 over the Web to customer browser 520, CSR browser 540, a Supervisor browser 560, and a Site Designer browser 580. Customer service agent 510 performs dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support.” Also, Kannan teaches at para.[0095], FIG. 8A shows an example of step 770. Service manager 610 receives the query input in step 755 by the customer through a customer service window. Service manager 610 stores the query in a queue of pending customer queries 613 (step 872). Queue 613 can store the customer URL or other customer identification and the customer input (e.g., question or form input). CSR queue(s) 614 also store available CSRs.”

The “intelligent routing” by Interact.service server, incorporating the Customer Service Agent is taught by Kannan at para.[0094] through [0111], as an “intermediate server.”

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Ben-Chanoch’s contact center by adding readily available “Interact.service server” as an intermediate server for intelligently routing including dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support as taught by Kannan.

It would have been also obvious for the reasons stated by Kannan in para.[0016] and [0017],” Internet chat programs have been used as well to provide limited customer service over the WWW. For example, a Web site is provided with a "Help" or "Customer Service" button. When a customer browsing the Web site presses the Help button for service, the customer is sent to a chat room to converse with a CSR. Such chat rooms, however, are not private or secure. Chat rooms are essentially a form of "many-to-many" communication. In a chat room, each customer query and a response by a CSR can be seen by all chat room participants. [0017] Similarly, other Internet services, such as, Internet Relay Chat (IRC) or newsgroups, are not suitable for providing customer service in commerce over the Web. IRC broadcasts messages to anyone logged on to IRC. See, Krol at pp. 342-346. In newsgroups, messages are posted and available to all newsgroups users. See, Krol, at pp. 151-185. Enhanced IRC, I-chat, and Palace services provide talk services but do not have adequate security or privacy and do not allow point-to-point communication behind firewalls.” along with the solutions of these issues packaged in "Interact.service server" , by stating in [0018] What is needed is an invention which provides on-line, live customer service between a potential customer and a customer service representative over the World Wide Web in real-time. Customer service is needed which is secure and responsive to particular customer needs. Customer service channeled through secure, private, human-to-human communication between a browsing customer and a CSR in real-time over the Web is needed.”

**Referring to claims 13 and 14,**

Ben-Chanoch teaches the routing system of claim 1 wherein the customer service representatives are agents operating within a communication center and connected to a local area network, and wherein the customer service representatives are remote agents operating from addressable locations on the network not confined to one location. (The reference teaches the element 2 of Fig.2 being an ATM or Ethernet Switch in col.2, line 11. It is well known that ATM switches are designed for LAN and WAN.)

**Referring to claim 15,**

Keeping in mind the teachings of the reference Ben-Chanoch as stated above, although the reference teaches routing instructions for disposing all communication events occurring within the center (col.3, line 11-25), the reference fails to teach the at least one intermediate server requests and receive routing instructions from a separate server containing an intelligent routing software suite.

Kannan teaches in Fig. 5B, readily available Interact.service server, element 505, incorporating the Customer Service Agent of Fig. 6, as taught at page 6, para.[0073], "Customer service agent 510 is preferably implemented on server 505, which in one embodiment is distinct from the Web server 500. Server 505 is coupled to databases 550 including Oracle, Lotus Notes, DB2, SQL Server, and other Relational Database Managements systems (RDBMS), or non-relational database systems. Server 505 communicates with Mail Gateway 592 and Fax/Pager Gateway 594. Server 505 is also coupled through Web server 500 over the Web to customer browser 520, CSR browser 540, a Supervisor browser 560, and a Site Designer browser 580. Customer service

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agent 510 performs dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support.” Also, Kannan teaches at para.[0095], “FIG. 8A shows an example of step 770. Service manager 610 receives the query input in step 755 by the customer through a customer service window. Service manager 610 stores the query in a queue of pending customer queries 613 (step 872). Queue 613 can store the customer URL or other customer identification and the customer input (e.g., question or form input). CSR queue(s) 614 also store available CSRs.”, and Para.[0071].

The “intelligent routing” by Interact.service server, incorporating the Customer Service Agent is taught by Kannan at para.[0094] through [0111], as an “intermediate server.”

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Ben-Chanoch’s contact center by adding readily available “Interact.service server” as an intermediate server for intelligently routing including dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support as taught by Kannan.

It would have been also obvious for the reasons stated by Kannan in para.[0016] and [0017],” Internet chat programs have been used as well to provide limited customer service over the WWW. For example, a Web site is provided with a “Help” or “Customer Service” button. When a customer browsing the Web site presses the Help button for service, the customer is sent to a chat room to converse with a CSR. Such



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chat rooms, however, are not private or secure. Chat rooms are essentially a form of "many-to-many" communication. In a chat room, each customer query and a response by a CSR can be seen by all chat room participants. [0017] Similarly, other Internet services, such as, Internet Relay Chat (IRC) or newsgroups, are not suitable for providing customer service in commerce over the Web. IRC broadcasts messages to anyone logged on to IRC. See, Krol at pp. 342-346. In newsgroups, messages are posted and available to all newsgroups users. See, Krol, at pp. 151-185. Enhanced IRC, I-chat, and Palace services provide talk services but do not have adequate security or privacy and do not allow point-to-point communication behind firewalls." along with the solutions of these issues packaged in "Interact.service server" , by stating in [0018] What is needed is an invention which provides on-line, live customer service between a potential customer and a customer service representative over the World Wide Web in real-time. Customer service is needed which is secure and responsive to particular customer needs. Customer service channeled through secure, private, human-to-human communication between a browsing customer and a CSR in real-time over the Web is needed."

**Referring to claims 16 and 17,**

Ben-Chanoch teaches routing system of claim 1 wherein the routing capability includes routing based on customer service representative availability, and routing system of claim 1 wherein the routing capability includes routing based on skill level of a customer service representative. (col. 3, lines 11-24)

**Referring to claim 18,**

Ben-Chanoch teaches a proxy server for routing instant messages sourced from clients connected to a data-packet-network to selected ones of a plurality of customer service representatives connected to the network and representing an enterprise (Fig.1, element 1, col. 2, lines 22-38):

at least one bi-directional data port for receiving data thereto and sending data there from (Fig.1, element 1, col.1, line 60-64);

at least one version of instant messaging software executable therein for generating, sending, and receiving instant messages (col.3, lines1-10);

a software routing component executable therein for routing client instant message requests to selected IP addresses on the network (col.3, line11-25); and

a software firewall component operable therein and capable of IP address translation (col. 2, lines 50-53, col. 1, line 60-64);

characterized in that the proxy server receives incoming instant message events for routing, identifies and interacts with individual clients using instant message protocol and routes qualified requests to available customer service representatives based on enterprise routing rules for instant messaging (col.3, line 11-25)

Ben-Chanoch as stated above, although the reference teaches wherein the at least one server requests and receives routing instructions for disposing all communication events occurring within the center (col.3, line 11-25), the reference fails to teach retrieved from the intermediate server containing an intelligent routing software suite used for disposing all communication events occurring within the enterprise.

Kannan teaches in Fig. 5B, readily available Interact.service server, element 505, incorporating the Customer Service Agent of Fig. 6, as taught at page 6, para.[0073], "Customer service agent 510 is preferably implemented on server 505, which in one embodiment is distinct from the Web server 500. Server 505 is coupled to databases 550 including Oracle, Lotus Notes, DB2, SQL Server, and other Relational Database Managements systems (RDBMS), or non-relational database systems. Server 505 communicates with Mail Gateway 592 and Fax/Pager Gateway 594. Server 505 is also coupled through Web server 500 over the Web to customer browser 520, CSR browser 540, a Supervisor browser 560, and a Site Designer browser 580. Customer service agent 510 performs dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support." Also, Kannan teaches at para.[0095], FIG. 8A shows an example of step 770. Service manager 610 receives the query input in step 755 by the customer through a customer service window. Service manager 610 stores the query in a queue of pending customer queries 613 (step 872). Queue 613 can store the customer URL or other customer identification and the customer input (e.g., question or form input). CSR queue(s) 614 also store available CSRs."

The "intelligent routing" by Interact.service server, incorporating the Customer Service Agent is taught by Kannan at para.[0094] through [0111], as an "intermediate server." Thus, Kannan teaches "at least one intermediate server connected to and addressable on the network and accessible to the instant message server the intermediate server having access to routing rules and capability and the intermediate

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server containing an intelligent routing software suite used for disposing all communication events occurring within the enterprise.”

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Ben-Chanoch's contact center by adding readily available “Interact.service server” as an intermediate server for intelligently routing including dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support as taught by Kannan.

It would have been also obvious for the reasons stated by Kannan in para.[0016] and [0017],” Internet chat programs have been used as well to provide limited customer service over the WWW. For example, a Web site is provided with a “Help” or “Customer Service” button. When a customer browsing the Web site presses the Help button for service, the customer is sent to a chat room to converse with a CSR. Such chat rooms, however, are not private or secure. Chat rooms are essentially a form of “many-to-many” communication. In a chat room, each customer query and a response by a CSR can be seen by all chat room participants. [0017] Similarly, other Internet services, such as, Internet Relay Chat (IRC) or newsgroups, are not suitable for providing customer service in commerce over the Web. IRC broadcasts messages to anyone logged on to IRC. See, Krol at pp. 342-346. In newsgroups, messages are posted and available to all newsgroups users. See, Krol, at pp. 151-185. Enhanced IRC, I-chat, and Palace services provide talk services but do not have adequate security or privacy and do not allow point-to-point communication behind firewalls.” along with

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the solutions of these issues packaged in "Interact.service server" , by stating in [0018] What is needed is an invention which provides on-line, live customer service between a potential customer and a customer service representative over the World Wide Web in real-time. Customer service is needed which is secure and responsive to particular customer needs. Customer service channeled through secure, private, human-to-human communication between a browsing customer and a CSR in real-time over the Web is needed."

**Referring to claim 19,**

Ben-Chanoch teaches proxy server of claim 18 wherein the data-packet-network is the Internet network. (Fig.1, element "INTERNET").

**Referring to claims 20 and 22,**

Ben-Chanoch teaches the proxy server of claim 18 wherein the client connection comprises a network appliance capable of instant messaging operationally coupled to the network, and wherein the network appliance is a computer.(col.3, line 1-25)

**Referring to claims 21 and 23,**

Ben-Chanoch teaches the proxy server of claim 18 wherein the customer service representative connection comprises a network appliance capable of instant messaging operationally coupled to the network, and wherein the network appliance is a computer. (col. 3, line 1-25, Fig.1, element 5)

**Referring to claims 24 and 25,**

Ben-Chanoch teaches the proxy server of claim 18 wherein the customer service representatives are human resources, and wherein the customer service

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representatives include automated systems. (col.3, line 11-24 and line 41-55)

**Referring to claims 26 and 27,**

Ben-Chanoch teaches the proxy server of claim 18 wherein after establishing a routed connection, the same server continues to host the communication transaction, and wherein routing destination is determined as a result of executed routing routines according to routing rules (Fig. 1, element 1, col.3, lines 10-24).

**Referring to claim 28,**

Ben-Chanoch teaches wherein the routing rules and executed routing routines are a software suite for determination of internal routing (col. 3, lines 10-24) for all multimedia (col. 1, lines 49-50) and COST events (Fig.1, element "PSTN" ) occurring within the center. However the reference fails to explicitly teach a transaction server.

The "intelligent routing" by Interact.service server, incorporating the Customer Service Agent is taught by Kannan at para.[0094] through [0111], as an "intermediate server." Including the functionality of a transaction server as evident by Fig. 5B.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Ben-Chanoch's contact center by adding readily available "Interact.service server" as an intermediate server for intelligently routing including dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support as taught by Kannan.

It would have been also obvious for the reasons stated by Kannan in para.[0016] and [0017], "Internet chat programs have been used as well to provide limited customer

service over the WWW. For example, a Web site is provided with a "Help" or "Customer Service" button. When a customer browsing the Web site presses the Help button for service, the customer is sent to a chat room to converse with a CSR. Such chat rooms, however, are not private or secure. Chat rooms are essentially a form of "many-to-many" communication. In a chat room, each customer query and a response by a CSR can be seen by all chat room participants. [0017] Similarly, other Internet services, such as, Internet Relay Chat (IRC) or newsgroups, are not suitable for providing customer service in commerce over the Web. IRC broadcasts messages to anyone logged on to IRC. See, Krol at pp. 342-346. In newsgroups, messages are posted and available to all newsgroups users. See, Krol, at pp. 151-185. Enhanced IRC, I-chat, and Palace services provide talk services but do not have adequate security or privacy and do not allow point-to-point communication behind firewalls." along with the solutions of these issues packaged in "Interact.service server", by stating in [0018] What is needed is an invention which provides on-line, live customer service between a potential customer and a customer service representative over the World Wide Web in real-time. Customer service is needed which is secure and responsive to particular customer needs. Customer service channeled through secure, private, human-to-human communication between a browsing customer and a CSR in real-time over the Web is needed."

**Referring to claims 29 and 30,**

Ben-Chanoch teaches the proxy server of claim 18 wherein the routing capability includes routing based on customer service representative availability, and wherein the

routing capability includes routing based on skill level of a customer service representative. (col. 3, lines 11-24)

**Referring to claim 31,**

Ben-Chanoch teaches a method for establishing an instant message communication channel over a data-packet-network between a client and a customer service representative representing an enterprise based on returned results of at least one executed routing routine (Fig. 1, col. 2, lines 22-38) comprising steps of:

(a) client establishment of a network connection; (b) establishing a client-to-server connection with an instant message server using an instant messaging software application; (Fig. 1, element 1, col. 60-64, col. 3, line1-24)

Although the reference Ben-Chanoch teaches intelligent routing of the client request and information obtained through client interaction; and (f) routing the client request from server to an appropriate customer service representative (col. 3, lines 1-24), the reference fails to explicitly teach the proxy server as claimed.

Kannan teaches in Fig. 5B, readily available Interact.service server, element 505, incorporating the Customer Service Agent of Fig. 6, as taught at page 6, para.[0073], "Customer service agent 510 is preferably implemented on server 505, which in one embodiment is distinct from the Web server 500. Server 505 is coupled to databases 550 including Oracle, Lotus Notes, DB2, SQL Server, and other Relational Database Managements systems (RDBMS), or non-relational database systems. Server 505 communicates with Mail Gateway 592 and Fax/Pager Gateway 594. Server 505 is also coupled through Web server 500 over the Web to customer browser 520, CSR browser



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540, a Supervisor browser 560, and a Site Designer browser 580. Customer service agent 510 performs dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support.” Also, Kannan teaches at para.[0095], FIG. 8A shows an example of step 770. Service manager 610 receives the query input in step 755 by the customer through a customer service window. Service manager 610 stores the query in a queue of pending customer queries 613 (step 872). Queue 613 can store the customer URL or other customer identification and the customer input (e.g., question or form input). CSR queue(s) 614 also store available CSRs.

The “intelligent routing” by Interact.service server, incorporating the Customer Service Agent is taught by Kannan at para.[0094] through [0111], as an “intermediate server.” Thus, Kannan teaches “at least one intermediate proxy server requesting execution of at least one intelligent routing routine on behalf of the client request and information obtained through client interaction and routing the client request from the proxy server to an appropriate customer service representative based on results of routine execution.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Ben-Chanoch’s contact center by adding readily available “Interact.service server” as an intermediate server for intelligently routing including dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support as taught by Kannan.

It would have been also obvious for the reasons stated by Kannan in para.[0016] and [0017],” Internet chat programs have been used as well to provide limited customer service over the WWW. For example, a Web site is provided with a "Help" or "Customer Service" button. When a customer browsing the Web site presses the Help button for service, the customer is sent to a chat room to converse with a CSR. Such chat rooms, however, are not private or secure. Chat rooms are essentially a form of "many-to-many" communication. In a chat room, each customer query and a response by a CSR can be seen by all chat room participants. [0017] Similarly, other Internet services, such as, Internet Relay Chat (IRC) or newsgroups, are not suitable for providing customer service in commerce over the Web. IRC broadcasts messages to anyone logged on to IRC. See, Krol at pp. 342-346. In newsgroups, messages are posted and available to all newsgroups users. See, Krol, at pp. 151-185. Enhanced IRC, I-chat, and Palace services provide talk services but do not have adequate security or privacy and do not allow point-to-point communication behind firewalls.” along with the solutions of these issues packaged in “Interact.service server” , by stating in [0018] What is needed is an invention which provides on-line, live customer service between a potential customer and a customer service representative over the World Wide Web in real-time. Customer service is needed which is secure and responsive to particular customer needs. Customer service channeled through secure, private, human-to-human communication between a browsing customer and a CSR in real-time over the Web is needed.”

**Referring to claim 32,**

Ben-Chanoch teaches the method of claim 31 wherein the data-packet-network is the Internet network. (Fig. 1, element "internet")

**Referring to claims 33 and 34,**

Ben-Chanoch teaches the method of claim 31 wherein in step (a) client connection comprises a network appliance having instant messaging capability operationally coupled to the network, and wherein in step (a) the network appliance is a computer. (col. 3, line 1-25)

**Referring to claim 35,**

Keeping in mind the teaching of the reference Ben-Chanoch as stated above, although the reference teaches "The customer may determine at what times or days he wishes to be contacted in what orders, and may specify same via a password.", col. 2, lines 50-53, (the instant message server optionally re-directs the client and relinquishes communication hosting.), the reference fails to teach to optionally re-directing the client to the proxy server.

Kannan teaches in Figs. 5A and 5B, readily available Interact.service server, element 505, incorporating the Customer Service Agent of Fig. 6, as taught at page 6, para.[0073], "Customer service agent 510 is preferably implemented on server 505, which in one embodiment is distinct from the Web server 500. Server 505 is coupled to databases 550 including Oracle, Lotus Notes, DB2, SQL Server, and other Relational Database Managements systems (RDBMS), or non-relational database systems. Server 505 communicates with Mail Gateway 592 and Fax/Pager Gateway 594. Server 505 is also coupled through Web server 500 over the Web to customer browser 520,

CSR browser 540, a Supervisor browser 560, and a Site Designer browser 580. Customer service agent 510 performs dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support.” Also, Kannan teaches at para.[0095], FIG. 8A shows an example of step 770. Service manager 610 receives the query input in step 755 by the customer through a customer service window. Service manager 610 stores the query in a queue of pending customer queries 613 (step 872). Queue 613 can store the customer URL or other customer identification and the customer input (e.g., question or form input). CSR queue(s) 614 also store available CSRs.”

The “intelligent routing” by Interact.service server, incorporating the Customer Service Agent is taught by Kannan at para.[0094] through [0111], as an “intermediate server.” Thus, Kannan teaches “re-directing the client to the proxy server.”

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Ben-Chanoch’s contact center by adding readily available “Interact.service server” as an intermediate server for intelligently routing including dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support as taught by Kannan.

It would have been also obvious for the reasons stated by Kannan in para.[0016] and [0017],” Internet chat programs have been used as well to provide limited customer service over the WWW. For example, a Web site is provided with a “Help” or “Customer Service” button. When a customer browsing the Web site presses the Help

button for service, the customer is sent to a chat room to converse with a CSR. Such chat rooms, however, are not private or secure. Chat rooms are essentially a form of "many-to-many" communication. In a chat room, each customer query and a response by a CSR can be seen by all chat room participants. [0017] Similarly, other Internet services, such as, Internet Relay Chat (IRC) or newsgroups, are not suitable for providing customer service in commerce over the Web. IRC broadcasts messages to anyone logged on to IRC. See, Krol at pp. 342-346. In newsgroups, messages are posted and available to all newsgroups users. See, Krol, at pp. 151-185. Enhanced IRC, I-chat, and Palace services provide talk services but do not have adequate security or privacy and do not allow point-to-point communication behind firewalls." along with the solutions of these issues packaged in "Interact.service server" , by stating in [0018] What is needed is an invention which provides on-line, live customer service between a potential customer and a customer service representative over the World Wide Web in real-time. Customer service is needed which is secure and responsive to particular customer needs. Customer service channeled through secure, private, human-to-human communication between a browsing customer and a CSR in real-time over the Web is needed."

**Referring to claim 36,**

Ben-Chanoch teaches the method of claim 31 wherein in step (d) the interaction results in at least client identification, version identification of instant message software used by the client, and a reason for requesting communication with a customer service representative. (col. 3, lines 1-24, col. 2, lines 22-38)

**Referring to claim 37,**

Ben-Chanoch teaches the method of claim 31 wherein in step (e) the at least one routing routine comprises an availability determination of existence of a network-connected customer service representative having a compatible instant messaging software to that used by the client. (col. 3, lines 1-24, col. 2, lines 22-38)

**Referring to claim 38,**

Ben-Chanoch teaches the method of claim 37 wherein in step (e) the at least one routing routine further comprises a skill level determination. (col.3, lines 21-25)

**Referring to claim 39,**

Keeping in mind the teachings of the reference Ben-Chanoch as stated above, although the reference teaches routing instructions for disposing all communication events occurring within the center (col.3, line 11-25), the reference fails to teach the at least one intermediate server requests and receive routing instructions from a separate server containing an intelligent routing software suite.

Kannan teaches in Fig. 5B, readily available Interact.service server, element 505, incorporating the Customer Service Agent of Fig. 6, as taught at page 6, para.[0073], "Customer service agent 510 is preferably implemented on server 505, which in one embodiment is distinct from the Web server 500. Server 505 is coupled to databases 550 including Oracle, Lotus Notes, DB2, SQL Server, and other Relational Database Managements systems (RDBMS), or non-relational database systems. Server 505 communicates with Mail Gateway 592 and Fax/Pager Gateway 594. Server 505 is also coupled through Web server 500 over the Web to customer browser 520, CSR browser

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540, a Supervisor browser 560, and a Site Designer browser 580. Customer service agent 510 performs dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support.” Also, Kannan teaches at para.[0095], “FIG. 8A shows an example of step 770. Service manager 610 receives the query input in step 755 by the customer through a customer service window. Service manager 610 stores the query in a queue of pending customer queries 613 (step 872). Queue 613 can store the customer URL or other customer identification and the customer input (e.g., question or form input). CSR queue(s) 614 also store available CSRs.” And Para.[0071]

The “intelligent routing” by Interact.service server, incorporating the Customer Service Agent is taught by Kannan at para.[0094] through [0111], as an “intermediate server.”

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Ben-Chanoch’s contact center by adding readily available “Interact.service server” as an intermediate server for intelligently routing including dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support as taught by Kannan.

It would have been also obvious for the reasons stated by Kannan in para.[0016] and [0017],” Internet chat programs have been used as well to provide limited customer service over the WWW. For example, a Web site is provided with a “Help” or “Customer Service” button. When a customer browsing the Web site presses the Help

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button for service, the customer is sent to a chat room to converse with a CSR. Such chat rooms, however, are not private or secure. Chat rooms are essentially a form of "many-to-many" communication. In a chat room, each customer query and a response by a CSR can be seen by all chat room participants. [0017] Similarly, other Internet services, such as, Internet Relay Chat (IRC) or newsgroups, are not suitable for providing customer service in commerce over the Web. IRC broadcasts messages to anyone logged on to IRC. See, Krol at pp. 342-346. In newsgroups, messages are posted and available to all newsgroups users. See, Krol, at pp. 151-185. Enhanced IRC, I-chat, and Palace services provide talk services but do not have adequate security or privacy and do not allow point-to-point communication behind firewalls." along with the solutions of these issues packaged in "Interact.service server" , by stating in [0018] What is needed is an invention which provides on-line, live customer service between a potential customer and a customer service representative over the World Wide Web in real-time. Customer service is needed which is secure and responsive to particular customer needs. Customer service channeled through secure, private, human-to-human communication between a browsing customer and a CSR in real-time over the Web is needed."

**Referring to claim 40,**

Keeping in mind the teaching of the reference Ben-Chanoch as stated above, the reference fails to teach wherein in step (f) the proxy server hosts the ongoing routed and established communication transaction.



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Kannan teaches in Figs. 5A and 5B, readily available Interact.service server, element 505, incorporating the Customer Service Agent of Fig. 6, as taught at page 6, para.[0073], "Customer service agent 510 is preferably implemented on server 505, which in one embodiment is distinct from the Web server 500. Server 505 is coupled to databases 550 including Oracle, Lotus Notes, DB2, SQL Server, and other Relational Database Managements systems (RDBMS), or non-relational database systems. Server 505 communicates with Mail Gateway 592 and Fax/Pager Gateway 594. Server 505 is also coupled through Web server 500 over the Web to customer browser 520, CSR browser 540, a Supervisor browser 560, and a Site Designer browser 580. Customer service agent 510 performs dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support." Also, Kannan teaches at para.[0095], "FIG. 8A shows an example of step 770. Service manager 610 receives the query input in step 755 by the customer through a customer service window. Service manager 610 stores the query in a queue of pending customer queries 613 (step 872). Queue 613 can store the customer URL or other customer identification and the customer input (e.g., question or form input). CSR queue(s) 614 also store available CSRs." And Para.[0071]

The "intelligent routing" by Interact.service server, incorporating the Customer Service Agent is taught by Kannan at para.[0094] through [0111], as an "intermediate server." Thus Kannan teaches the proxy server hosts the ongoing routed and established communication transaction.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to enhance Ben-Chanoch's contact center by adding readily available "Interact.service server" as an intermediate server for intelligently routing including dialog or call management, service process management, knowledge management and customer interaction in accordance with the type of support as taught by Kannan.

It would have been also obvious for the reasons stated by Kannan in para. [0016] and [0017], "Internet chat programs have been used as well to provide limited customer service over the WWW. For example, a Web site is provided with a "Help" or "Customer Service" button. When a customer browsing the Web site presses the Help button for service, the customer is sent to a chat room to converse with a CSR. Such chat rooms, however, are not private or secure. Chat rooms are essentially a form of "many-to-many" communication. In a chat room, each customer query and a response by a CSR can be seen by all chat room participants. [0017] Similarly, other Internet services, such as, Internet Relay Chat (IRC) or newsgroups, are not suitable for providing customer service in commerce over the Web. IRC broadcasts messages to anyone logged on to IRC. See, Krol at pp. 342-346. In newsgroups, messages are posted and available to all newsgroups users. See, Krol, at pp. 151-185. Enhanced IRC, I-chat, and Palace services provide talk services but do not have adequate security or privacy and do not allow point-to-point communication behind firewalls." along with the solutions of these issues packaged in "Interact.service server" , by stating in [0018] What is needed is an invention which provides on-line, live customer service between a

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potential customer and a customer service representative over the World Wide Web in real-time. Customer service is needed which is secure and responsive to particular customer needs. Customer service channeled through secure, private, human-to-human communication between a browsing customer and a CSR in real-time over the Web is needed.”

**Referring to claim 41,**

The reference Ben-Chanoch teaches method of claim 31 wherein in step (f) the instant message server continues to host the ongoing routed and established transaction. (Fig.1, element 1, col. 1 line 60-64)

**Referring to claim 42,**

The reference Ben-Chanoch teaches the method of claim 31 wherein in step (f) the transaction is conducted through a firewall. (col.2, lines 50-53)

***Conclusion***

**Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100